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| 09/626,535 | 07/27/2000 | Donald F. Hooper | 10559-137002 / P7876X | 1214 |

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| EXAMINER |
|---|
| ENG, DAVID Y |

| ART UNIT | PAPER NUMBER |
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| 2455 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)☒ Responsive to communication(s) filed on *16 December 2008*.

2a)☐ This action is **FINAL**.     2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)☒ Claim(s) *7-17 and 21* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *7-17 and 21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

## Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____ .

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

## DETAILED ACTION

In response to a restriction requirement mailed on 11/13/2008, Applicants

elected, without traverse, Group II, claims 7-17 and 21 for examination. Claims 1, 3-6

and 18-20 are therefore withdrawn from consideration. The active claims are 7-17 and

21.

## Specification

The Examiner is unable to find the support of that the threads are time sharing

(claims 8 and 9) or not time sharing (claims 10 and 11). Applicants are requested to

identify the support of claims 8-11 and 14 in the specification.


## *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

Claims13, 16 and 17 are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

Scope of limitation of claim 13 is not clear. There is no antecedent basis for the

"the same code".

Claims 16 and 17 are not understood. It is not seen how the steps as recited in

claims 16 and 17 are related to the processing steps of their parent independent claim

15.

## *Claim Rejections - 35 USC § 103*

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 7-17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kahle et al (USP 6,212,542) in view of Belkin (USP 6,604,125).

Kahle teaches:

**Claims 7, 12, 15**

A method of processing a network packet (Belkin, the secondary reference, teaches processing packet) received over a network (Belkin teaches packets received over a network) at a processor having multiple programmable multi-threaded engines integrated within the processor (Kahle, the primary reference, teaches a multiscalar processor having multiple programmable multi-thread engines, see at least Figure 4 and the abstract and the description of the multiscalar throughout the patent of Kahle), the method comprising:

processing a first portion of the network packet (processing of data by the multiscalar processor of Kahle) received at a port (the port in Kahle at where data is received to be processed) of a media access control device (label of the port, no processing of media is recited, not patentably distinct) using a first thread (threads are scheduled by the thread scheduler 130 in Figure 4) provided by any of the multiple programmable multi-threaded engines (PEs 132-138 in Figure 4 of Kahle) integrated within the processor to move the first portion of the network packet to a first location in a

memory coupled to the processor (data in Kahle is moved in and out of memories within

the multiscalar processor 100 shown in Figure 4); and

simultaneously (threads are simultaneously scheduled such that the PEs in

Kahle are simultaneously operative) processing a second portion of the network packet

(processing of data by the multiscalar processor of Kahle) using a second thread

(threads are scheduled by the thread scheduler 130 in Figure 4) provided by any of the

multiple programmable multi-threaded engines (PEs 132-138 in Figure 4 of Kahle)

integrated within the processor to move the second portion of the network packet to a

second location in the memory (data in Kahle is moved in and out of memories within

the multiscalar processor 100 shown in Figure 4) .

Scope of the independent claims:

There is nothing recited in the claims for processing media packets or

communication using a network. The claims merely recite storing portions of a data

called packet received from a port of a device called media access control device to

memory locations using a thread provided by an engine of a multiscalar processor.

Certainly, the threads provided by the PEs of Kahle's multiscalar processor are capable

of storing data received from a port to a memory location. The only difference is that it is

not clear whether or not Kahle's multiscalar is operated in a network environment. The

data and the receiving port in Kahle therefore are not labeled respectively as packet and

port of a media access control device. Using multiscalar processor for processing

packets in a network communication environment is well known in the art. Belkin

teaches such a processor. From the teaching of Belkin, it would have been obvious to a

person of ordinary skill in the art use a multiscalar processor having threads provided by the multithreaded engines for processing packets in a network communication environment such that multiple packets can be processed simultaneously.

## Claims 8, 9, 10, 11, 14, 13

With respect to claims 8-11 and 14, the wherein-statements merely consist of non-functional descriptive materials. The wherein-statements fail to recite steps to render the processing steps of independent claims to process packets in a timeshare or non-timeshare manner. The wherein-statements are therefore descriptive in natures and have no functional value.

Claim 13 is rejected for the same reasons as set forth above. The wherein-statements merely consist of non-functional descriptive materials.

## Claims 16, 17

It is noted that the processing steps as recited in parent claim 15 do not require interrupt handling. Interrupt handling is well known in programming. If interrupt handling is required, it would have been obvious to a person of ordinary skill in the art to provide instructions for doing that.

## Claim 21

ALU, control store, counter and registers are basic components of a processing element.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID Y. ENG whose telephone number is 571-272-3984. The examiner can normally be reached on M-F from 8AM to 3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, SALEH NAJJAR, can be reached on 571-272-4006. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/DAVID Y. ENG/
Primary Examiner, Art Unit 2455